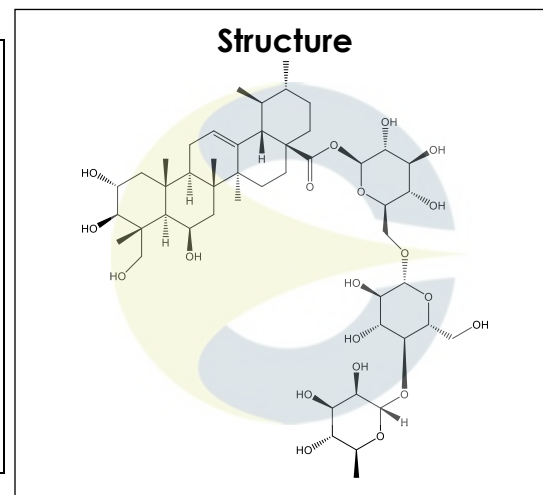


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PRODUCT NAME	Madecassoside
PART NUMBER	00013015-221
STANDARD TYPE	Primary (P)
LOT NUMBER	00013015-221
REPORT NUMBER	CDXA-RSS-9059-00
SAMPLE NUMBER	CDXP-20-00433
DATE OF SAMPLE	06/17/2020
DATE OF REPORT	07/28/2020



CHEMICAL NAMES	Asiaticoside A
CHEMICAL FORMULA	C ₄₈ H ₇₈ O ₂₀
MOLECULAR WEIGHT (MW)	975.12
CHEMICAL FAMILY	Saponins
CAS NUMBER	[34540-22-2]
EC#(EINECS)	252-076-1
RTECS	YU9555000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	92.7%
HPLC	0.700.10.2.METH22	NA	98.5%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	MeOH – 2.0% EtOH – 0.6%
Water	0.700.12.37	NA	3.4%
Appearance	NA	NA	White powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 92.7% IS BASED ON (100 - 2.5 SOLVENTS - 3.4 WATER) X 98.5% HPLC

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	06/2025 under the above conditions.

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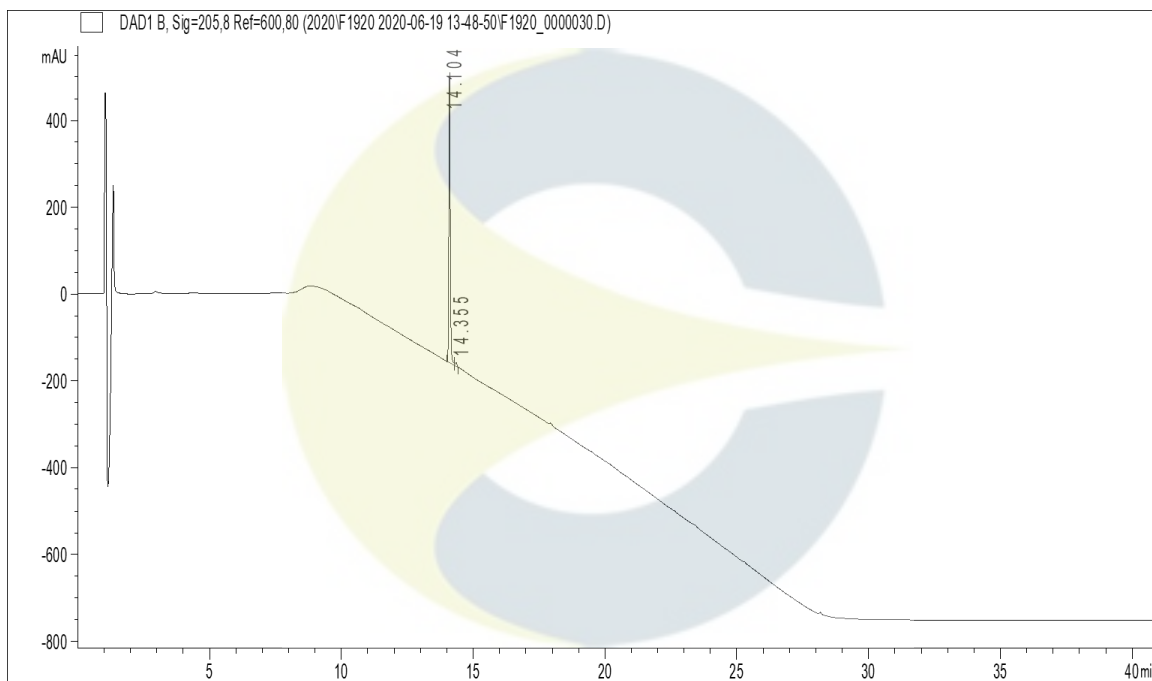
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes, then decreasing to 5% B over 1 minute.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	4.0 µL
INJECTION CONC.	0.99 mg/mL in Methanol
DETECTION	205 ± 4 nm

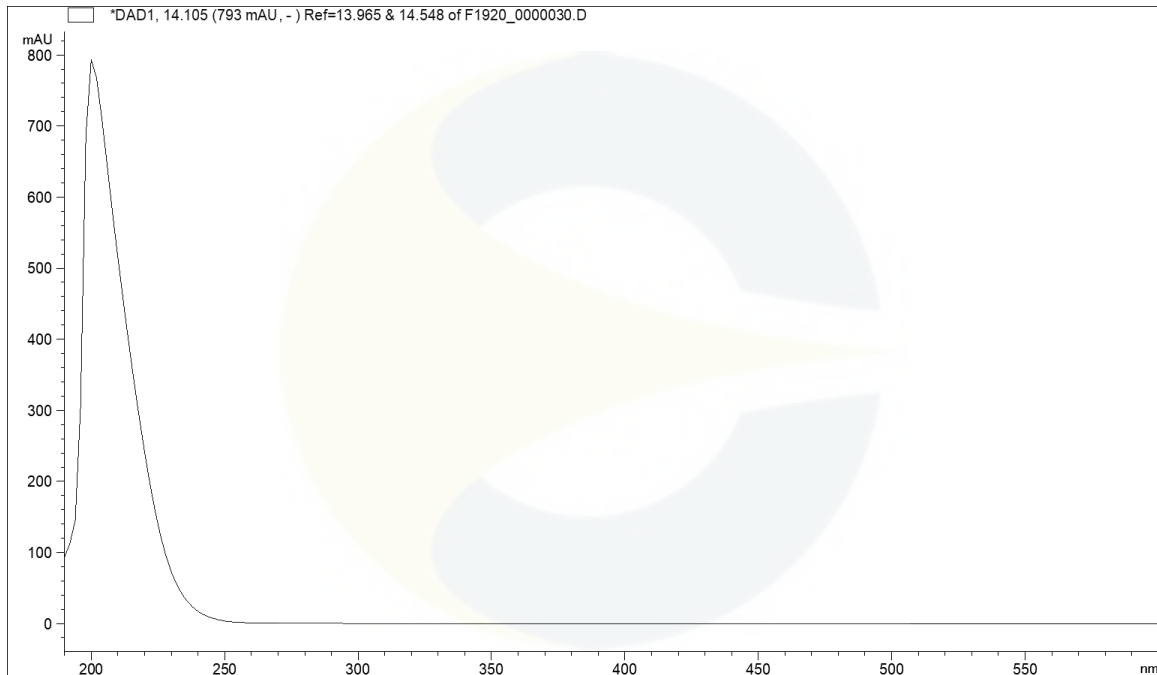
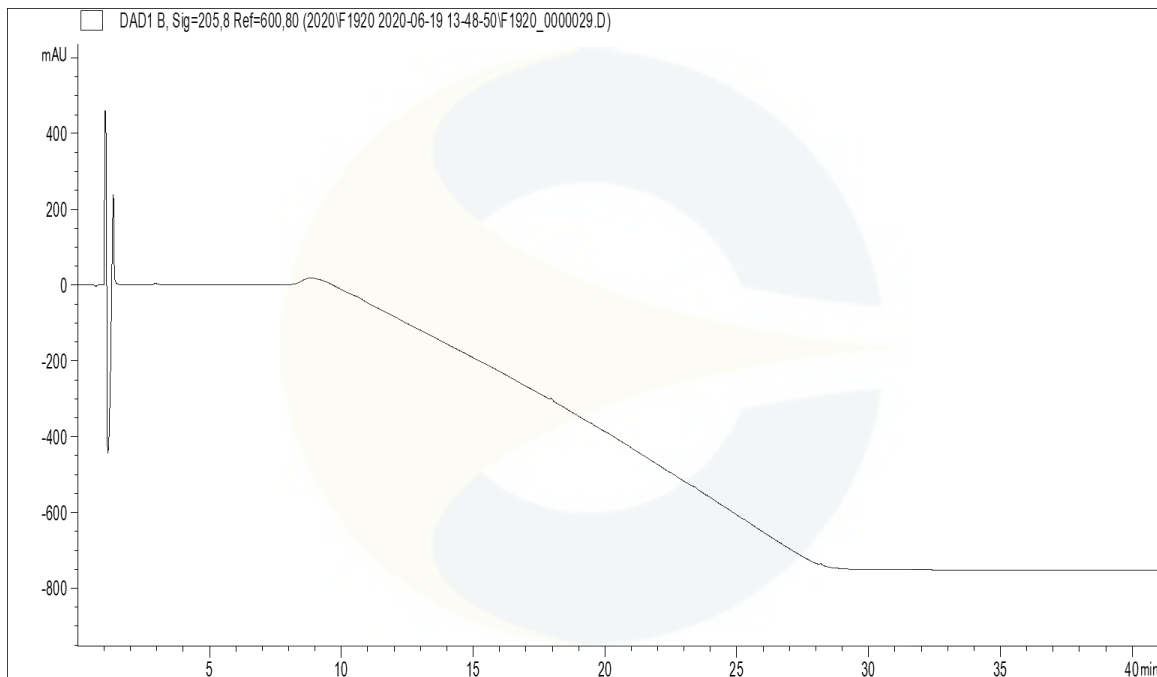
HPLC CHROMATOGRAM OF MADECASSOSIDE (CDXP-20-00433)



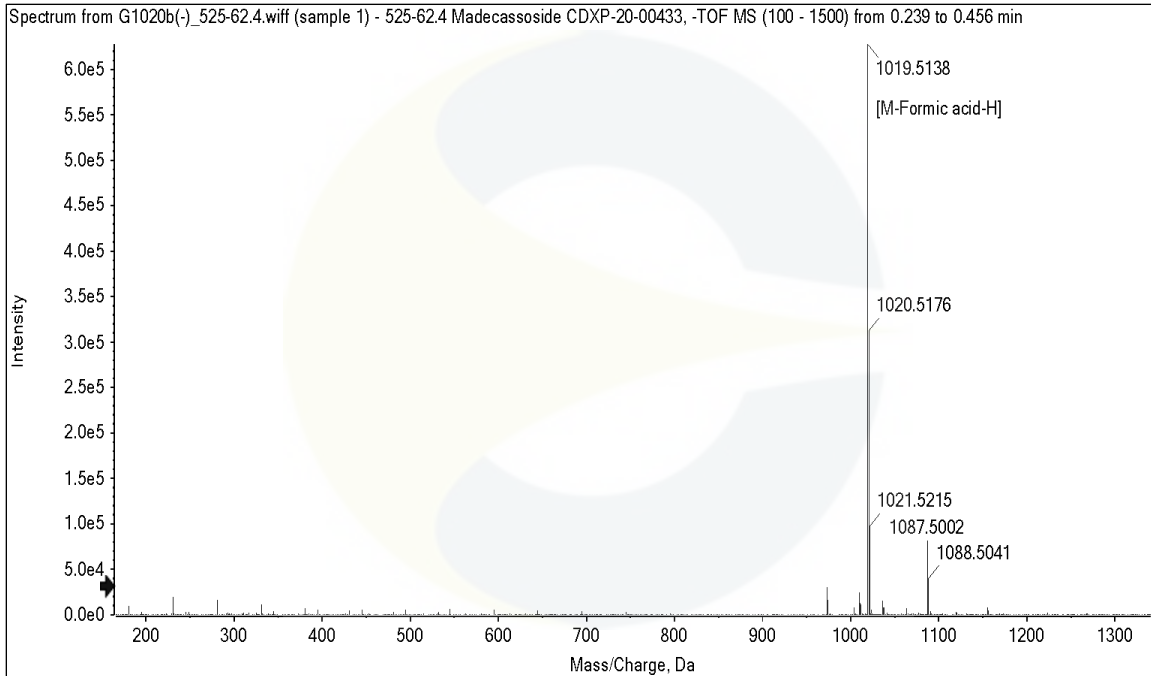
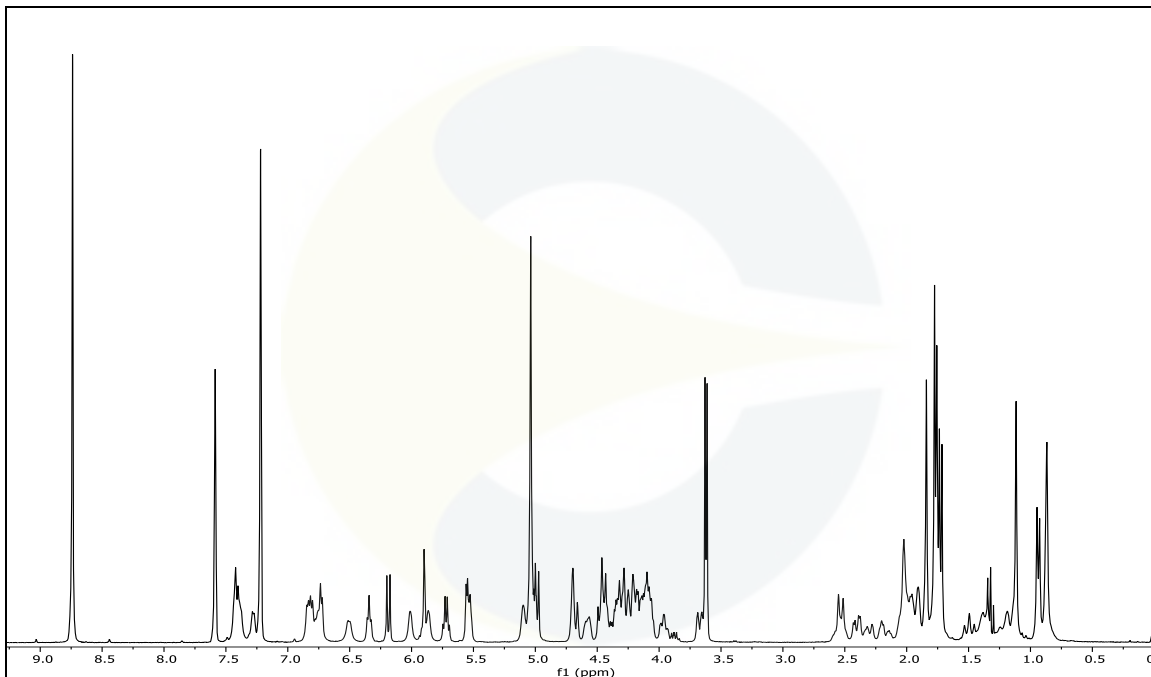
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UV SPECTRUM AT RT = 14.1 MINUTES**HPLC CHROMATOGRAM OF DILUENT BLANK**

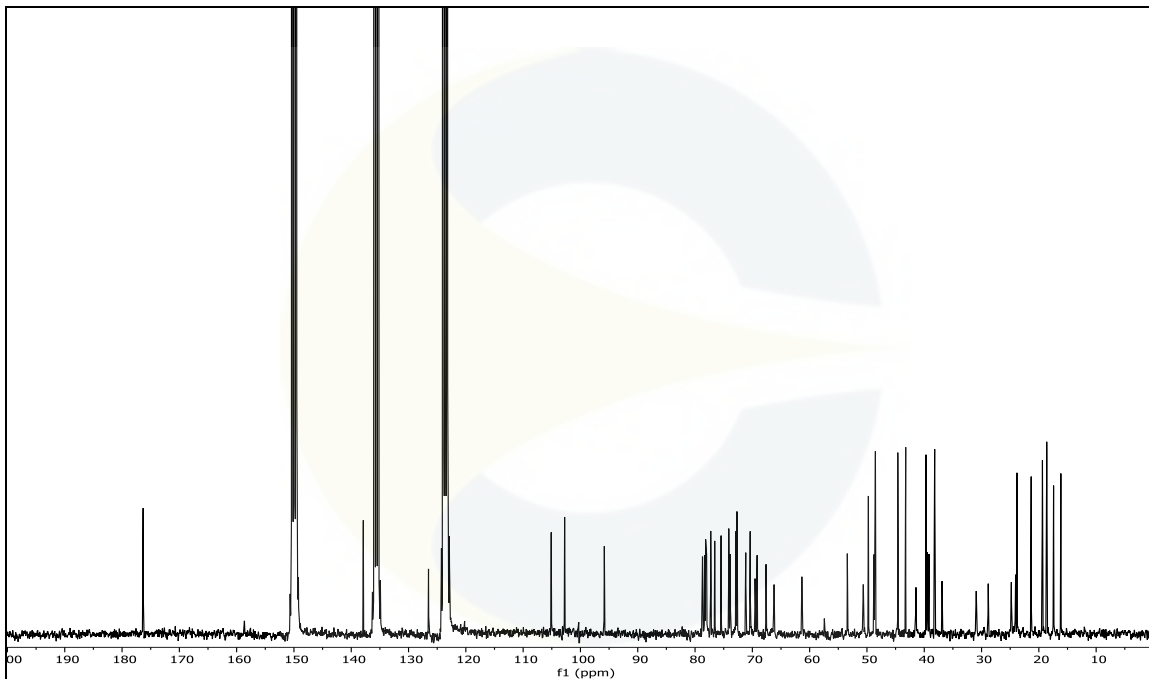
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MASS SPECTRUM OF MADECASSOSIDE (CDXP-20-00433)

¹H-NMR SPECTRUM OF MADECASSOSIDE (CDXP-20-00433) IN PYRIDINE-d₅


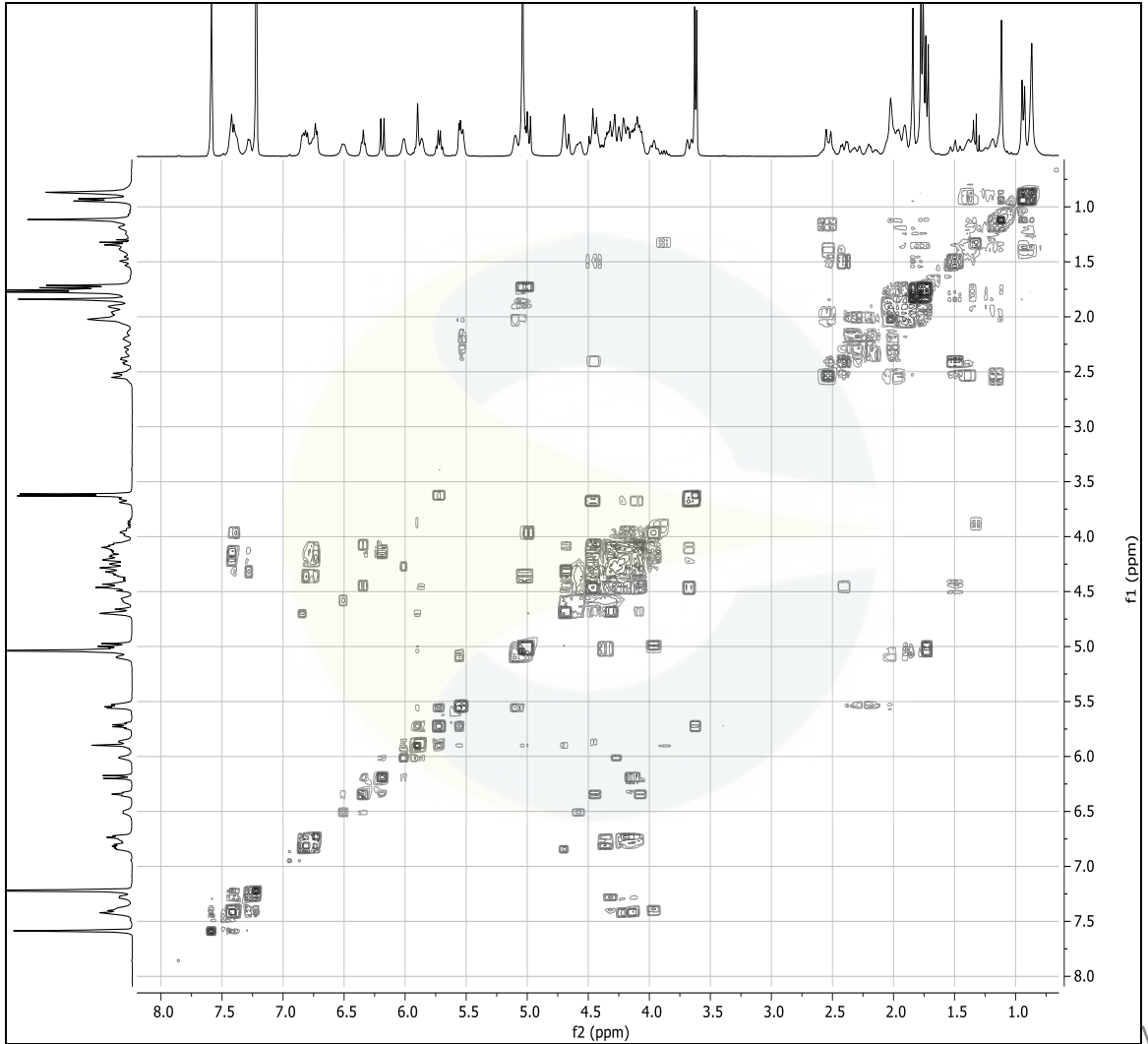
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 ^{13}C -NMR SPECTRUM MADECASSOSIDE (CDXP-20-00433) IN PYRIDINE- d_5 

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COSY-NMR SPECTRUM OF MADECASSOSIDE (CDXP-20-00433) IN PYRIDINE-d₅

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	07/28/2020	New report

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